## **SECTION 01 79 00**

## **DEMONSTRATION AND TRAINING**

# PART 1 - GENERAL

## 1.01 SECTION INCLUDES

- A. Training sessions.
- B. Training manuals and training aids.

### 1.02 MEASUREMENT AND PAYMENT

A. Separate measurement or payment will not be made for work required under this Section. All costs in connection with the work specified herein will be considered to be included with the related item of work in the Bid Schedule of the Bid Form, or incidental to the Work.

### 1.03 TRAINING SESSIONS

## A. General:

- 1. Prior to Final Inspection and Acceptance, instruct and train the District's designated operating and maintenance (O&M) personnel in the operation, start-up and shut-down, adjustment, troubleshooting, servicing, and preventive maintenance of all equipment and systems.
- 2. Explain to the District's O&M personnel, in full and to their complete understanding, all procedures necessary to operate and maintain all equipment and systems on a continuing basis.
- 3. Provide training manuals and other instructional materials and teaching aids as required to properly perform the required instruction and training.
- 4. Review the contents of all O&M Manuals specified in Section 01 78 23, Operation and Maintenance Data, with the District's O&M personnel in full detail to explain all aspects of the Manuals and the operation and maintenance of all equipment and systems.
- 5. Provide classroom and on-site instruction as most appropriate for the particular equipment or system or as specified more specifically in the individual specifications sections.
- 6. Provide the services of manufacturers' representatives for instruction and training when special equipment and systems require the knowledge and expertise of the various manufacturers for the proper operation and servicing of such equipment and systems.

#### DEMONSTRATION AND TRAINING

- 7. Operation and Maintenance Manuals are specified in Section 01 78 23, Operation and Maintenance Data, and may be used for training manuals where appropriate.
- 8. Various specific and detailed requirements for instruction and training of BART personnel are specified in the individual Sections of these Specifications, as applicable, and in the Contract Specifications.

### B. Classroom Sessions:

- 1. The Contractor shall provide instruction and training sessions in the operation and maintenance of all equipment and systems for BART O&M personnel prior to acceptance by the Engineer of the affected work.
- 2. Training sessions shall be conducted by representatives of the various equipment and product manufacturers and the Subcontractors who are involved in the installation and acceptance testing of the affected equipment and systems. Training sessions shall enable a qualified service technician to troubleshoot and sustain the equipment and systems.
- 3. The Engineer will provide a classroom facility for such instruction and training sessions, located in a BART facility in Oakland, California. Approximately fifteen BART maintenance persons will attend each training session.
- 4. The Contractor shall schedule the training sessions through the Engineer at a time convenient to the District. The Contractor shall notify the Engineer of the proposed training sessions at least 30 Days before the dates the training will be held.
- C. On-Site and Hands-on Sessions: Provide on-site, hands-on training sessions as required to demonstrate actual maintenance procedures on the equipment. Hands-on training shall provide BART personnel with actual maintenance experience.
- D. Videotaping Rights: The Engineer shall have the right to videotape any and all training sessions presented by the Contractor. The Engineer shall also have the right to use these videotapes for future BART-conducted training courses.

# 1.04 TRAINING MANUALS AND TRAINING AIDS

- A. The Contractor shall provide training manuals to supplement the O&M Manuals specified in Section 01 78 23, Operation and Maintenance Data, and submit them to the Engineer for review and approval at least 60 Days before the scheduled start of training sessions. Training manuals shall be prepared specifically for use as training aids.
- B. Provide each training-session participant with one copy of pertinent training manuals at the start of training sessions. Provide the Engineer with two additional training manuals for file and reference documents.
- C. Upon completion of each training session or course of instruction, instructor's manuals, training manuals, training aids and special tools shall become the property

### DEMONSTRATION AND TRAINING

- of the District. Provide the Engineer with all revisions to the training manuals throughout the Contract and Guaranty periods.
- D. The District reserves the right to copy all training manuals and training aids for use in District-conducted training courses.
- E. The Contractor shall provide all special tools, equipment, training aids, and other materials required for the training of BART personnel. The number of special tools and other training equipment shall be adequate for the number of participants attending the training sessions.

# **PART 2 - PRODUCTS**

Not Used

# **PART 3 - EXECUTION**

Not Used

**END OF SECTION 01 79 00**